Lung cancer: media backgrounder

Quick facts

- Worldwide, lung cancer is the second most common cancer and the leading cause of cancer death in both men and women, causing more deaths than colon, breast, and prostate cancer combined^{1,2}.
 - Each year, an estimated 1.8 million cases of lung cancer are diagnosed roughly 14% of all new cancer diagnoses^{1,3}.
 - In the US, an estimated 158,080 Americans are expected to die from lung cancer each year – about 27% of all cancer deaths⁴.
- There are three main types of lung cancer:
 - non-small cell lung cancer (NSCLC), the most common type, accounting for 80% to 85% of all cases;
 - o small cell lung cancer (SCLC), accounting for 10% to 15% of cases;
 - \circ lung carcinoid tumor¹.

What causes lung cancer?

- **Smoking** is the leading risk factor for lung cancer, resulting in about 80% of lung cancer deaths¹.
 - Each year nearly 125,000 current or former smokers in the US and 1,040,000, worldwide, die of lung cancer. 65% of all lung cancer deaths are caused by former smoking⁵.
 - **Secondhand smoke**, or breathing in the smoke of others, can increase risk of lung cancer and causes approximately 7,000 lung cancer deaths annually¹.
- Not all people who get lung cancer are current or former smokers.
 - Exposure to **radon**, **asbestos**, or **other carcinogens** (cancer-causing agents) can also increase lung cancer risk¹.
 - In addition to family history, various acquired underlying genomic mutations known as biomarkers can lead to a lung cancer diagnosis. Researchers have identified 15 unique mutations that may drive tumor growth^{1,6}.

What are treatment options for lung cancer?

- As treatment needs can vary from patient to patient, the availability of multiple options at the time of diagnosis can be beneficial.
 - Surgery, radiation, chemotherapy, targeted treatments and immunotherapy alone or in combination—may be used to treat lung cancer, depending on the stage of the cancer and other factors¹.
- Surgical removal of the tumor is most often used for early stage NSCLC¹.
- **Chemotherapy** may be employed before or after surgery or, in stage III NSCLC, on its own¹.
- **Targeted therapy** interferes with specific pathways that are involved in the growth, progression and spread of cancer, and is often considered for certain mutation-driven lung cancers⁷.
- **Immunotherapy** helps the immune system fight cancer as an "enemy" and boosts natural defenses to improve or restore immune system function⁸.
- Scientists are currently exploring the interplay between targeted therapy and immune response in the attempt to unleash the full potential of these treatments, combining and sequencing them in thoughtful and creative ways.

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